

## **Corporate Attributes as Correlates of Social Accounting Reporting: The Mediating Role of CEO Education**

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**ABSTRACT:** *This study determined the moderating effect of corporate attributes and social accounting reporting: the moderating role of chief executive officers' educational qualification in Nigeria. This study adopted ex-post facto research design. Simple random sampling technique to sample listed consumer and health companies. Secondary data derived from the financial statements of listed healthcare and consumer's firms were reviewed for the study for the period 2017-2021. The data set was first subjected to pre-regression analyses which include descriptive statistics analyses, correlation analyses and the test for normality of residua. Logistic regression was used for the data analysis. Findings of the study revealed there is a significant moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on financial, social reporting disclosures of listed Nigerian companies. It was recommended that company boards should factor in CEO educational qualifications when choosing a chief executive for the company. Also, Organizations must set up market measures and parameters that will empower them to be educated about being socially and environmentally responsible to make corporate social responsibility fruitful and to make industrial products meet anticipated economic, social and environmental needs.*

**KEYWORDS:** Triple bottom line, environment, social and governance (ESG), firm performance, corporate social responsibility, social accounting

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### **INTRODUCTION**

A new trend has also emerged where value relevance of corporate sustainability research is measured through the overall strategy of assessing the Environmental, Social and Governance approach (ESG) in addition to financial performance. Theoretically, this line of literature propagates that ESG performance is considered an intangible asset by investors and is reflected in

the market value of firms as stated by Heal (2005). ESG includes the corporate governance dimension of corporate sustainability along with the environmental and social dimensions. This corporate governance aspect deals with how firms are managed and controlled to provide transparency in financial reporting and risk management. Hence, corporate governance is an important factor in corporate sustainability, as it aligns investor interest with the firm's overall objective in the view of the concept shared by Porter and Kramer (2011). It is considered that a firm's sustainability activities have value relevance if they are mutually beneficial for both the firm and society or it can be argued that the economic aspect of firms is equally important along with the ESG approach for sustainable development.

The unique attributes of firms are said to be important determinants of their performance (Rumelt, 1991). Firm characteristics such as firm size, leverage, age of firm amongst others influence firms' environmental reporting practices. It is also widely believed that firm characteristics influence the quality and quantity of environmental information reported by firms (Hackstone & Milne 1996). Presently in Nigeria, corporate social responsibility disclosures are still voluntary disclosures and there are no reporting standards regulating social and environmental information to be reported in annual reports in line with global best practices which encourages voluntary reporting (Goyal, 2013). However, firm attributes is projected to influence the extent of reporting social and environmental disclosures. This study researches on firm size, leverage and board size as attributes the might influence sustainability reporting. It also worth noting that central to all company activities is the role of the chief executive officer (CEO).

CEO characteristics and firm performance have been a topic of increased interest in both academic and popular literature. Such interest gained impetus from the assumption that CEOs have a strategic role to play in the performance of a firm given the symbolic power that they exercise on decision making and key operations of a firm. CEO educational background is vital for a firm given that such background may influence the way business problems are perceived and the mental process which they use in the decision making process (Fligstein, 1990). Fligstein (1990) attributes these changes and importance of certain educational background of CEOs to organizational strategies which he terms conception of control.

Several studies have verified that CEOs play significant roles in their firms' effectiveness because they are at the highest level of management; and, are those who are in charge of formulating and implementing strategies towards their firms' successes (Liu et al., 2018). A number of studies documented that CEO characteristics significantly affect financial reporting quality (Huang et al., 2012). While it is possible that firm attributes might influence triple bottom line (TBL) reporting, it is pertinent to investigate the extent to which CEO educational qualifications might moderate the influence of firm attributes on TBL reporting.

### **Statement of the problem**

Reporting TBL is fast gaining support among researchers, however, since it is fairly new in Nigeria and given that sustainability reporting is still voluntary disclosure, measuring its impact is quite challenging. In spite of the numerous systems, policies and investments put in place by companies, a majority of scholars are of the consensus that managerial characteristics such as education, experience, and age influences the mental orientation of CEO in such a way that they perceive organizational problems and business challenges differently and also respond in different ways. However, there remain some differences on the actual educational background which are suitable for enhancing firm performance given the growing and complex dynamics which firms are exposed to. The pivotal question which this research will then answer is whether CEO educational background does in fact moderate the influence of firm attributes on TBL reporting. CEO educational background could be viewed as a proxy measure of CEO intelligence. Could this suggest that more intelligent CEOs would be better at handling complex organizational problems and enhance firm performance due to their high capacity to process information?

### **Objectives of the study**

The broad objective of the study is to determine the moderating effect of CEO educational qualifications on the influence of corporate attributes and corporate social reporting of listed Nigerian firms. Specifically, the study will seek to

- i. Examine the influence of firm size, leverage and board size on social performance disclosures of listed Nigerian companies.
- ii. Ascertain the moderating effect of CEO educational qualifications on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies.

### **Research questions**

The following research questions are stated for the study

- i. What is the influence of firm size, leverage and board size on social performance disclosures of listed Nigerian companies?
- ii. What is the moderating effect of CEO educational qualifications on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies?

### **Research hypotheses**

The following research hypotheses are stated to guide the study

Ho<sub>1</sub>: There is no significant influence of firm size, leverage and board size on social performance disclosures of listed Nigerian companies.

Ho<sub>2</sub>: There is no significant influence of the moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies.

## LITERATURE REVIEW

### Social accounting

In defining social accounting, Gray et al. (1996) stated that social accounting or corporate social reporting (CSR) is “the process of communicating the social and environmental effects of organizations” economic actions to particular interest groups and as such involves “extending the accountability of companies beyond the provision of financial accounts to the owners of capital (particular shareholders). Crowther (2000) defined social accounting as ‘an approach to reporting a firm’s activities which stresses the need for the identification of socially relevant behaviour, the determination of those to whom the company is accountable for its social performance and the development of appropriate measures and reporting techniques’.

The social dimension of sustainable accounting, often called as "the People," is a facet of sustainability accounting that incorporates the cost a business incurs in connection with socially linked issues such as employee welfare packages, community involvement, and product/consumer related difficulties. Companies are part of society, thus the community expects them to improve healthcare initiatives, donate to charities, promote children's education, provide work conditions for the disabled, and engage in occupational qualification programs (Dordu, et al., 2021). Socially responsible activities are primarily focused on attempts to alleviate poverty, avoid human rights violations, and improve society's overall social well-being.

Since business is a socio-economic activity that derives its input and employs resources from inside society, firms' goals should be equally focused on ensuring the welfare of society. From a business standpoint, social sustainability is about emphasizing the influence of the company on people and society. It's all about assessing potential harm, needs, and goals. It's also about making proactive and enthusiastic contributions to human development and well-being in the present and future. The least quantifiable aspect of sustainability, or the triple bottom line, is social sustainability. Human rights, fair labour standards, work hours, and health, safety, and wellness are all aspects of social sustainability inside the organization. Diversity, equity, work-life balance, and empowerment are some of the more intricate aspects. Community participation and charity, for example, are examples of social sustainability outside of the corporation. Product quality responsibility, including product performance, safety, and standards, reflects this as well. The social, economic, and environmental dimensions of sustainability are all intertwined (Dordu, et al., 2021).

Social disclosure is a means of addressing the exposure companies face with regards to the social environment. Also, the ‘the social legitimacy of business is monitored through the public-policy arena rather than the marketplace and, as such, the extent of social disclosure should be more closely related to the public pressure variables than the profitability measures.’ (Patten, 1991). In his study of the factors driving the social disclosures of 156 Fortune 500 companies, Patten (1991)

finds support for these arguments. He finds size and industry classifications (which cover the most polluting industries) to be the main factors associated with social disclosures. In addition to size and industry, poor environmental performance appears to drive higher environmental disclosures.

### **Corporate attributes of firms**

Corporate attributes are internal variables that influence corporate policy and decision (Shehu, 2009). They are specific variables that enhance the possibility of achieving corporate goal. Shehu, (2009) divided corporate attributes into two basic groups: corporate performance attributes and corporate structural attributes. The corporate performance attributes includes corporate growth and profitability, while the corporate structural attributes include corporate size, corporate leverage, corporate age and management efficiency. According to Suhaila, et al, (2008), those attributes distinguishes one firm from another and can determine the outcome of their performance.

### **Moderating effect of CEO educational qualification and firm performance**

The Chief Executive Officer (CEO) is one of the critical players in the corporate sector. Specifically, CEOs pursue important and strategic decisions that can influence the performances of their firms. Drucker (1954) in Marwan, et al. (2020) averred that the most important determinant of the survival and success of a firm are based on the performance and quality of the top managers in the firm. In other words, CEOs have crucial roles to play for the firm's successes or failures.

Evidently, CEO characteristics have been listed among numerous factors that influence firms, as reported by several studies. The CEO's personality is likely to have an important impact on a firm's success (Malik, 2015). Apparently, CEO educational qualifications can also contribute to firm performance. Advanced degrees from stellar institutions can be an indicator of a CEO's unobservable talent, intellect, and capability to persevere in a challenging environment, because such institutions are very selective and have stringent entry requirements (Certo, 2003; Miller et al., 2015); Higher or better quality educational training can potentially enhance an individual's knowledge, skills, perspective, and ability to understand technical and abstract concepts (Bai, et al, 2018); Higher education, especially from reputable institutions, might also be an indicator of a greater depth and quality of social networks acquired in college and graduate school (Colombo et al., 2019).

### **Theoretical framework**

#### **The upper echelons theory by Hambrick & Mason (1984)**

Upper echelons theory states that organizational outcomes – both strategies and effectiveness – are reflections of the values and cognitive bases of powerful actors (senior executives) in the organization (Hambrick & Mason, 1984). More specifically, the theory states that top managers' perception of their corporate environment influences the strategic choices they make which eventually affects the performance of the organization. It further states that their fields of vision

(the areas top managers direct their attention to) and for that matter the perceptions of the environment that result are restricted by their cognitive base and values.

Hambrick (2007) derived the idea that managerial characteristics can be used to (partially) predict organizational outcomes based on the notion that the choices of top managers are influenced by their cognitive base and their values. Hambrick(2007) further submitted that both the characteristics and strategic choices of upper echelons may be influenced by the situational characteristics of the organization, such as external environment or firm characteristics, which are thus antecedents to managerial characteristics and/or organizational outcomes. The upper echelons theory assumes that complex and unpredictable situations are not objectively determined, but rather vary from one context to another and hence, are merely interpretable (Hambrick, 2007). The major supposition of the theory is that organizational processes and outcomes are partially predicted by the characteristics of the dominant coalition of powerful actors in the organization. It was suggests that the limitations of top management team members influence organizational problem diagnosis and decision outcomes. The theory argues that actions taken by top executives are dependent on the executive's functional background and demographic profile consisting of age, gender, education and ethnic orientation (Hambrick, 2007).

### **Empirical review**

Etim, Ekpoese, Akporien, & Akpan (2023) examined the influence of the firm's characteristics on asset growth of quoted companies in Nigeria. The central aim was to investigate how the profitability, leverage and revenue growth influence asset growth of the quoted companies on the Nigerian Stock Exchange. Whilst the firm's characteristics were measured by profitability, leverage and revenue growth and asset growth was measured by the difference between prior year and current year of non-current asset. This study focused on Ex post facto sourcing of data from the annual financial reports of the relevant companies from 2008 to 2019 fiscal years. Besides, the generated data were analyzed using the descriptive and inferential statistics while the regression analysis model was adopted for estimating the test result. However, findings revealed an insignificant influence of firm characteristics (profitability, leverage and revenue growth) on asset growth quoted companies in Nigeria. The result, therefore, showed that firm's characteristics insignificantly contribute to the asset growth of companies. It was recommended among others that companies should carefully monitor all elements that indicate assets growth and not merely focus on firm characteristics alone, since it does not completely isolate firms from the threats of asset growth issues.

Saidu (2019) investigated CEO characteristics and firm performance: focus on origin, education and ownership. This study examines the impact of the chief executive officer's (CEO) ownership, education and origin on firm performance. The study uses balanced panel data for 6 years from 2011 to 2016 to run ordinary least square regression. The sample of the study comprises 37 firms which met the relevant information disclosure criteria. The study considers data for a 6-year period



from 2011 to 2016 leading to 222 firm year observation. For the purpose of this study, market price of the equity, return on asset (ROA), and return on equity are used as the dependent variables which are the measure of the firm performance. To find the relationship between the study variables, this study uses ordinary least square regression to test the hypothesis on the relationship between the CEO characteristics and firm performance. The findings indicate that CEO education improves profitability. Similarly, stock performance gets improved when the CEO has prior experience of the firm before being appointed as the chief executive officer.

Saidi, et al, (2021) researched CEO Financial Education and Bank Performance. They examine the impact of the educational background in general and the financial education particularly of Chief Executive Officers (CEOs) on bank performance of the Tunisian resident banks. Data for the sample are obtained first using a questionnaire. The first data source of this work is the questionnaire while some of data have been manually collected from the annual reports of banks for the period between 2017 and 2019, which were checked via the sites of the banks, central bank of Tunisia BCT and the site of the Tunisian stock exchange BVMT. Also the personal characteristics of CEOs have been collected by consulting their profiles on social networks, from articles published on line and others were asked directly by visiting them at their banks. This study makes use of various discrete and continuous variables. Dummy variables were used to account for discrete variables. Dummy variables can assign the value of 0 or 1. 0 would indicate the absence of the variable and I would indicate the presence of the variable. The dummy variables were used because of the presence of qualitative independent variables. These dummy variables have been used to represent the various types of CEO educational backgrounds (finance, engineering, economics, accountability or management). The independent variables were used to explain variations in the dependent variable. The information gathered from the annual reports of these banks and using a research questionnaire shows that the educational path ways for most CEOs in the Tunisian bank system are financially educated. This paper finds that CEO educational attainment, both level and field, matters for bank performance. More specifically the regression analysis offer robust evidence that banks led by CEOs with higher education outperform their peers. The main result of this paper is that CEO financial education positively affects bank performance.

Altuwaijri and Kalyanaraman (2020) researched CEO Education-Performance Relationship: Evidence from Saudi Arabia. The study investigates the association between CEO education and firm performance with a sample of 85 nonfinancial firms listed on the Saudi stock exchange during 2018 applying ordinary least squares method. CEO education is defined by three variables, the level of education, if the degree-granting institution is domestic or foreign, and if the highest degree is in management or other fields of study. Financial performance is measured by return on assets and return on equity. Firm size, age, liquidity and growth are introduced as control variables. The study shows that 58 CEOs of the firms studied are graduates, 38 have obtained their degree from a domestic institution and 44 have a management degree. Graduate CEOs are found to

enhance performance. Graduating from a domestic institution influences performance positively. Management degree of CEO does not seem to impact performance. Firm size, liquidity and growth are positively associated with performance. Firm age does not explain performance differences of firms. Results are robust to performance measures.

## RESEARCH METHODOLOGY

This study adopts *ex-post facto* and analytical research design based on secondary data collected from annual financial reports of selected listed manufacturing firms in Nigeria. The population of the study is made up of all consumer goods firms and all health care firms of the manufacturing sector listed on the Nigerian Exchange group from 2012 to 2019. Simple random sampling technique was used to sample 27 companies and CEOs from the listed consumer goods firms and all health care firms on the Nigerian exchange group.

In this study, secondary data source is employed. Secondary data is preferred because the data for the sampled listed manufacturing firms were sourced from the Nigerian Stock Exchange Fact Books and sampled companies' Annual Financial Reports for the periods covered in the study. Furthermore, Content Analysis was used as an instrument of secondary data to collect the necessary information for this study on the variables of triple bottom line reporting.

### Method of data analysis

The data set was first subjected to pre-regression analyses which includes descriptive statistics analyses, correlation analyses and the test for normality of residua. The descriptive statistics is employed to examine the characteristics of the data: Mean Maximum, Minimum, and Standard Deviation. The correlation analysis is employed to evaluate the association between the variables and to check for possible multi-collinearity among the variables of interest. Regression (Logistic Regression) analyses technique as a method of data analyses is employed to establish the effect of the independent variables on the dependent variable of interest and to identify the direction of the effect.

### Model specification

This study adopted the model of Orazalin (2019) employed for samples obtained from commercial banks of Kazakhstan and modified it to suit the hypotheses of this study.

The adopted model is represented as

### CSR reporting moderated model specification

$$SRG_{it} = \beta_0 + \beta_1 Bsize_{it} + \beta_2 FSize_{it} + \beta_3 FLev_{it} + \beta_4 bsize_{it} * CEOEDUQ + \beta_5 FSize_{it} * CEOEDUQ + \beta_6 FLev_{it} * CEOEDUQ + \mu_{it} \dots \dots \dots (3)$$

Where.

SRG = Sustainability reporting governance



BFSIZE = Board Size

FSize = Firm Size

FLev = Leverage

CEOEDUQ = CEO Educational Qualification

$B_4$  to  $\beta_6$  are interaction terms obtained between CEO Educational Qualification and board size ( $\beta_4$ )

Firm Size ( $\beta_5$ ) Firm Leverage ( $\beta_6$ )

i = ith firm

t = time

## PRESENTATION OF FINDINGS

**Table 1: Cross tabulation of descriptive statistics of variables**

|                    | N   | Minimum | Maximum | Mean    | Std. Deviation |
|--------------------|-----|---------|---------|---------|----------------|
| ROA                | 135 | .81     | 735.48  | 49.0566 | 91.94091       |
| FSZ                | 135 | 3.68    | 8.76    | 7.1671  | 1.05937        |
| LEV                | 135 | .13     | 1283.25 | 13.0213 | 110.45067      |
| BSZ                | 135 | 4.00    | 10.00   | 6.5926  | 1.16732        |
| SOCDISC            | 135 | .00     | 4.00    | 2.5111  | 1.01383        |
| CEDEDU             | 135 | 1.00    | 3.00    | 2.2296  | .65723         |
| Valid N (listwise) | 135 |         |         |         |                |

**Source: Author's Computation 2022**

Table 1 presents the summary of mean and standard deviation of the dependent and independent variables of the study. The Return on assets (ROA) representing financial performance disclosure has a mean value of 49.05 with a high standard deviation value of 91.94. This indicates that the companies reported ROA have very high differences. The firm size proxied by the Log of total assets has a mean value of 7.16 and a low standard deviation score of 1.05, indicating that the values all cluster around the mean. Leverage has a mean value of 3.53 and a high standard deviation of 8.28, indicating that the companies have varied leverage and were dispersed from the mean. Social disclosures have minimum and maximum values of 0 and 4 respectively, indicating that some companies reported very little or none social responsibilities for the period under review. The mean and standard deviation for social disclosure is 2.5 and 1.01 respectively. This indicates that the reported values all cluster around the central mean.

**Table 2: Correlation matrix for relationship among variables**

|             |                     | ROA   | FSZ   | LEV   | BSZ   | SOC<br>DISC | CEO<br>EDU |
|-------------|---------------------|-------|-------|-------|-------|-------------|------------|
| ROA         | Pearson Correlation | 1     |       |       |       |             |            |
|             | Sig. (2-tailed)     |       |       |       |       |             |            |
| FSZ         | Pearson Correlation | .149  | 1     |       |       |             |            |
|             | Sig. (2-tailed)     | .085  |       |       |       |             |            |
| LEV         | Pearson Correlation | .021  | .109  | 1     |       |             |            |
|             | Sig. (2-tailed)     | .807  | .210  |       |       |             |            |
| BSZ         | Pearson Correlation | .122  | -.018 | -.045 | 1     |             |            |
|             | Sig. (2-tailed)     | .160  | .837  | .604  |       |             |            |
| SOC<br>DISC | Pearson Correlation | .145  | .047  | .043  | .076  | 1           |            |
|             | Sig. (2-tailed)     | .094  | .586  | .623  | .379  |             |            |
| CEO<br>EDU  | Pearson Correlation | -.079 | -.131 | -.024 | -.043 | -.032       | 1          |
|             | Sig. (2-tailed)     | .361  | .130  | .778  | .624  | .714        |            |

**Source: Author's Computation 2022**

Table 2 presents the correlation between and among the variables. The result shows that return on asset (ROA) has a positive but not significant relationship with firm size (.149). ROA also has positive correlations with social disclosure (SOCDISC)(.145), Board size (.122) and with leverage (LEV)(.021). Similarly, social disclosure has positive relationships with firm size, board size, leverage and return on assets.

#### **Multicollinearity test**

The study tested for multicollinearity to detect whether there is a strong or perfect correlation among the independent variables. The presence of multicollinearity can affect the regression output and lead to the wrong conclusion. The study used the Variance Inflation Factor (VIF) and Tolerance to detect the presence of multicollinearity.

**Table 3: Summary of Variance Inflation Factor (VIF)**

| Model        | Collinearity Statistics |       |
|--------------|-------------------------|-------|
|              | Tolerance               | VIF   |
| 1 (Constant) |                         |       |
| FSZ          | .975                    | 1.026 |
| LEV          | .987                    | 1.014 |
| BSZ          | .997                    | 1.003 |
| CEO<br>EDU   | .977                    | 1.024 |

**Source: Author's Computation 2022**

In order to assess the multicollinearity of the variables considered, the tolerance and VIF values are used. From Table 3, the tolerance values of the variables are consistently smaller than 1. This shows that there is complete absence of multicollinearity. The VIF values, moreover, reaffirm the complete absence of multicollinearity among the variables considered since the values are consistently lower than ten (10). Thus, the data is free of strong or perfect correlation among the independent variables.

### Testing of hypotheses

**H<sub>01</sub>:** There is no significant of influence of firm size, leverage and board size on social performance disclosures of listed Nigerian companies.

**Table 4: Summary of regression analysis for influence of firm size, leverage and board size on social performance disclosures**

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| C                  | 1.750283    | 0.789275              | 2.217583    | 0.0283   |
| FSZ                | 0.042332    | 0.083704              | 0.505732    | 0.6139   |
| BSZ                | 0.068636    | 0.075590              | 0.908007    | 0.3655   |
| LEV                | 0.000380    | 0.000804              | 0.472753    | 0.6372   |
| R-squared          | 0.009892    | Mean dependent var    |             | 2.511111 |
| Adjusted R-squared | -0.012782   | S.D. dependent var    |             | 1.013835 |
| S.E. of regression | 1.020293    | Akaike info criterion |             | 2.907239 |
| Sum squared resid  | 136.3708    | Schwarz criterion     |             | 2.993322 |
| Log likelihood     | -192.2387   | Hannan-Quinn criter.  |             | 2.942221 |
| F-statistic        | 0.436281    | Durbin-Watson stat    |             | 1.025723 |
| Prob(F-statistic)  | 0.727401    |                       |             |          |

Table 4 shows that as firm size increases, social disclosure increases. With a probability value of .614, Firm size has a positive but not significant influence on social disclosure. Board size has a beta coefficient of -.068, indicating an inverse relationship with social disclosure. Thus, as board size reduces, social disclosure increases and vice versa. The result is however not significant. Leverage has a positive but not significant relationship with social disclosure. The Fstat is .436 and the probability of value is .727. Since the Prob. Fstat is greater than .05 ( $p > .05$ ), the result is statistically not significant. Thus, there is no significant of influence of firm size, leverage and board size on social performance disclosures of listed Nigerian companies.

**H<sub>02</sub>:** There is no significant moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies.

**Table 5: Summary of Regression Test for moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on social reporting disclosures**

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.  |
|--------------------|-------------|-----------------------|-------------|--------|
| C                  | 1.851934    | 0.358591              | 5.164476    | 0.0000 |
| FSZ                | 0.039572    | 0.034152              | 1.158724    | 0.2469 |
| BSZ                | 0.067764    | 0.030613              | 2.213572    | 0.0271 |
| LEV                | 0.000377    | 0.000325              | 1.160743    | 0.2461 |
| FSZ--CEO_EDU       | -0.034128   | 0.064576              | -0.528493   | 0.5973 |
| LEV--CEO_EDU       | -0.034128   | 0.064576              | -0.528493   | 0.5973 |
| BSZ--CEO_EDU       | -0.034128   | 0.064576              | -0.528493   | 0.5973 |
| SOCDISC--CEO_EDU   | -0.034128   | 0.064576              | -0.528493   | 0.5973 |
| CEO--CEO_EDU       | -0.034128   | 0.064576              | -0.528493   | 0.5973 |
| EDU--CEO_EDU       | -0.034128   | 0.064576              | -0.528493   | 0.5973 |
| R-squared          | 0.010372    | Mean dependent var    | 2.511111    |        |
| Adjusted R-squared | -0.000761   | S.D. dependent var    | 1.010697    |        |
| S.E. of regression | 1.011081    | Akaike info criterion | 2.872187    |        |
| Sum squared resid  | 817.8283    | Schwarz criterion     | 2.930175    |        |
| Log likelihood     | -1153.236   | Hannan-Quinn criter.  | 2.894450    |        |
| F-statistic        | 0.931651    | Durbin-Watson stat    | 1.032157    |        |
| Prob(F-statistic)  | 0.496582    |                       |             |        |

**Source: Author computation**

Table 5 gives the summary of the panel logistic regression test. The result shows when moderated with CEO educational qualifications, firm size, board size and leverage all have negative but significant influence on social disclosure. This implies an inverse relationship. As when moderated with CEO educational qualifications, large board size, firm size and leverage have negative relationship with social disclosure. Thus, social disclosure reduces as CEO qualifications is factored into board size, firm size and leverage. The result also shows that probability value is .496, indicating that the result is statistically not significant. Thus, there is no significant moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies.

**DISCUSSION OF FINDINGS**

The findings of the study are discussed under relevant subheadings.

**Corporate attributes and social disclosure**

Result of analysis indicates that board size has inverse negative relationships with social disclosures, Leverage has negative relationship with social disclosure and Firm size has positive relationship social disclosure. The hypothesis test confirms that there is no significant of influence of firm size, leverage and board size on social performance disclosures of listed Nigerian companies. This finding is in line with Nguyen (2020) who studied the relationship between board of directors and sustainability reporting. The findings indicate significant negative relation between board size and GRI adherent level of sustainability reporting. Further analysis is

implemented for environmentally friendly and sensitive industries. This finding is further supported by Ifeanyi, et al, (2020) whose research findings established that corporate attributes have no significant effect on social and environmental disclosures.

### **Moderating effect of CEO educational qualification on Corporate attributes and social disclosure**

Findings from analysis reveal that when moderated with CEO educational qualifications, firm size, board size and leverage all have negative but significant influence on social disclosure. Thus, the inverse relationship indicates that CEOs educational qualification has impact on the corporate attributes, which in turn influences social disclosure. The corresponding hypothesis test shows that there is a significant moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies. This finding agrees with Saidu (2019) who investigated CEO characteristics and firm performance. The findings indicate that CEO education improves profitability. This finding is further collaborated by Saidi, et al, (2021) researched CEO Financial Education and Bank Performance. They examine the impact of the educational background. They found that CEO educational attainment, both level and field, matters for bank performance.

### **CONCLUSION**

Based on the findings of the study, it is concluded that firm attributes have a positive but not significant effect on social accounting reporting. However, when moderated with CEO educational qualifications, firm attributes significantly influences sustainable reporting governance of health and consumer goods companies in Nigeria. There is a significant moderating effect of CEO educational qualification on the influence of firm size, leverage and board size on social reporting disclosures of listed Nigerian companies.

### **Recommendations**

Based on the results of the empirical analysis, the following set of recommendations are made:

- i. Company boards should factor in CEO educational qualifications when choosing a chief executive for the company.
- ii. Based on these results, listed manufacturing firms should reduce firm size and operating expenses so as to increase the return on assets of their firms.
- iii. The study therefore calls for standard setting bodies to set up a social environmental reporting framework in order to improve the level of corporate social /sustainability disclosures among of listed firms.

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